

From: Robert Pyke [mailto:bobpyke@attglobal.net]
Sent: Thursday, January 26, 2012 01:20 PM
To: Isenberg, Phil@DeltaCouncil
Cc: Grindstaff, Joe@DeltaCouncil
Subject: the role of professional judgment

Phil,

I enjoyed your exchange with Bob Twiss this morning on the meaning of the left hand end of his fourth measure of the elements of the Delta Plan. I was yelling at my monitor: "No! Deference to professional experience and judgment does not mean catering to a particular interest - you have got to get over your obsession with all opinions being biased in favor of one special interest or another!" Professional experience and judgment is the basis for all good engineering and the practice of other professions such as medicine. Certainly such judgments should be consistent with the best available science but rarely if ever is the scientific understanding complete enough that you can develop "bottom-up" solutions based solely on scientific findings. Indeed, if the people who try to do this are honest about including the uncertainties the results are usually nonsense because accounting for the uncertainties drives the median results in a more conservative direction, and if they don't include the uncertainties the results are also biased. I won't bore you with examples from the Yucca Mountain Project, on which I worked for eight years, or from DRMS, but there are many of them and it is why very smart people like Greg Gartrell agree that trying to calculate the optimum prioritization for levee expenditures or anything-else on the basis of "science" is a fool's errand.

This is not to say that professional engineering opinions are never biased in favor of the client's point-of-view or driven by the consultant wanting to suck up to the client. Frequently they are. But the same is true in the so-called scientific community who pretend to be holier than the rest of us, but are not. The allegation that "scientific" findings are strongly influenced by the perpetual need to generate research funds is always stoutly denied by those who are doing this, but that does not mean that it is not true!

I was delighted to hear you say that public policy requires input from engineering as well as science and, although I am not sure that you said this, I think you would agree from economics as well. But when are engineering and economics going to get anything like equal time before the DSC? I know that you will get some of this input at your February meeting that is considering the Economic Sustainability Plan, but I mean on a continuing basis.

Regards,

Bob

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